

WHAT IS CLAIMED IS:

- 1 1. A method for generating a customized coded video sequence
2 based on a subscriber's input, comprising:
3 receiving a multimedia data input from the subscriber that includes
4 image data;
5 extracting the image data from the multimedia data input;
6 deriving virtual camera scripts and coding hints from the image
7 data;
8 generating a video sequence based on the subscriber's input, the
9 extracted image data, and the derived virtual camera scripts and coding hints;
10 coding the generated video sequence based on the coding hints;
11 and
12 outputting the customized coded video sequence to an output
13 device.
- 1 2. The method of claim 1, further comprising:
2 receiving preference information from one of the subscriber and a
3 service provider;
4 storing the preference information in a subscriber profile; and
5 generating the video sequence based on the subscriber's profile.
- 1 3. The method of claim 2, wherein the subscriber's profile includes at
2 least one of format settings, coding preferences, handicap settings, storage
3 addresses of image data, device characteristics, and billing information.
- 1 4. The method of claim 3, wherein the format settings include at least
2 one of text font settings, text style settings, and display settings.
- 1 5. The method of claim 3, wherein the coding preferences are used as
2 coding hints and include at least one of audio coding preferences and visual
3 coding preferences.
- 1 6. The method of claim 3, wherein the handicap settings include at
2 least one of visual enhancement settings and audio enhancement settings.

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1 7. The method of claim 3, wherein the storage addresses of image
2 data include at least one of a computer image file, an image database, a Web
3 page address, a universal resource locator (URL), a floppy disk, and CD ROM.

1 8. The method of claim 2, wherein the subscriber's profile includes
2 billing information.

1 9. The method of claim 1, wherein the coded video sequence output is
2 a customized advertisement.

1 10. The method of claim 2, wherein the coded video sequence output
2 includes one or more images based on the storage addresses of image data
3 from the subscriber's profile.

1 11. The method of claim 2, wherein the subscriber provides multimedia
2 data input and preference information to the input unit using at least one of a
3 touch-tone menu, an interactive voice response system, a voice recognition
4 system, a touch screen, a stylus, a keyboard, a Web page, the Internet, to
5 telephone, a cable TV, a personal computer, and a wireless communication
6 device.

1 12. The method of claim 2, wherein the subscriber's profile includes
2 information about the display devices owned by the subscriber.

1 13. The method of claim 12, wherein the coded video sequence output
2 is customized for at least one of the devices included in the subscriber's profile.

1 14. The method of claim 1, further comprising storing the extracted
2 image data in an image data database, the derived virtual camera scripts in a
3 virtual camera scripts database, and the derived coding hints in a coding hints
4 database.

1 15. The method of claim 1, further comprising receiving one or more
2 input commands from a user, wherein at least one of the steps of extracting,
3 deriving, generating, coding and outputting are performed based on the user's
4 input commands.

1 16. The method of claim 1, wherein the image data include image data
2 from at least one of images, pixelmaps, a series of still frames, panorama
3 images, a series of photographs from a film, web-pages, single files containing

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4 vector representation of text and graphics, short video clips, single files
5 containing a vector representation of synthetically coded 3D worlds, and
6 lightfields of single objects.

1 17. The method of claim 1, wherein the virtual camera scripts include at
2 least one of a sliding window of resolution, a document browsing simulation, a
3 general composition of images, synthesized videos from a set of images, a
4 panorama synthesis, and parallax techniques.

1 18. The method of claim 1, wherein the coding hints include at least
2 one of motion information used to generate a sequence of frames, temporal
3 evolution of each frame, and coding parameters for each image.

1 19. The method of claim 1, wherein the generating step uses a
2 rendering plug-in to decode portions of the image data into pixel maps.

1 20. The method of claim 1, wherein the generating step uses
2 addresses to generate an image sequence.

1 21. The method of claim 20, wherein the addresses include URLs.

1 22. The method of claim 1, wherein the generating step generates the
2 video sequence from more than one multimedia source.

1 23. The method of claim 22, wherein the multimedia sources include at
2 least one of television, cable TV, interactive TV, Internet, telephone, computer
3 generated images, wireless communications, photographs and electronically
4 stored still images.

1 24. The method of claim 1, further comprising receiving an audio input
2 corresponding to the generated video sequence.

1 25. The method of claim 24, further comprising synchronizing the audio
2 input with the generated video sequence.

1 26. The method of claim 1, further comprising:
2 receiving audio input from the subscriber, the audio input stored as
3 at least one of a computer file and an address.
4 storing the subscriber's audio input in the subscriber's profile;
5 retrieving the subscriber's audio input; and

6 outputting the subscriber's audio input in conjunction with the
7 generated video sequence.

1 27. The method of claim 1, wherein the coded video sequence is output
2 using scrolling techniques.

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